

ATTACHMENT 32

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

CISCO SYSTEMS,)
INC.,)
Plaintiff,)
vs.) No. 5:14-cv-05344-BLF (PSG)
ARISTA NETWORKS,)
INC.,)
Defendant.)

CONFIDENTIAL INFORMATION UNDER THE PROTECTIVE ORDER

VIDEOTAPED DEPOSITION OF ANTHONY J. LI

Palo Alto, CA

Monday, February 1, 2016

Volume I

Reported by: SUSAN F. MAGEE, RPR, CCRR, CLR

CSR No. 11661

JOB No. 2224600

PAGES 1-258

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<p>1 A. 1990.</p> <p>2 Q. And the USC you're referring to, that's the</p> <p>3 University of Southern California; correct?</p> <p>4 A. Correct.</p> <p>5 Q. Do you have any other degrees besides the 09:19:58</p> <p>6 bachelor's degree and your Ph.D.?</p> <p>7 A. No.</p> <p>8 Q. Your LinkedIn profile marked as Exhibit 136</p> <p>9 states that you attended Rutgers University; is that</p> <p>10 correct? 09:20:20</p> <p>11 A. I spent one year at Rutgers. Did not get a</p> <p>12 degree there.</p> <p>13 Q. Was your focus at the University of</p> <p>14 Southern California on anything in particular?</p> <p>15 A. I was working on a Ph.D. in computer 09:20:31</p> <p>16 science in the programming languages area.</p> <p>17 Q. What programming languages were you working</p> <p>18 on.</p> <p>19 A. So it was not a specific language. It was</p> <p>20 in language theory, and in particular I was working 09:20:47</p> <p>21 on compiler specifications.</p> <p>22 Q. What routing protocols, if any, did you</p> <p>23 learn about as part of obtaining your Ph.D. at USC?</p> <p>24 A. None; however, as a postdoc at USC, I</p> <p>25 actually worked on IDPR, Inter-Domain Policy 09:21:13</p> <p style="text-align: right;">Page 14</p>	<p>1 A. EGP is a routing protocol that allows</p> <p>2 individual hosts to advertise routing prefixes to</p> <p>3 the gateways of the then ARPANET or MILNET.</p> <p>4 Q. Is EGP a standardized routing protocol?</p> <p>5 A. Yes, it is. 09:23:29</p> <p>6 Q. How do you know that?</p> <p>7 A. I've read the RFC.</p> <p>8 Q. What is an RFC, Mr. Li?</p> <p>9 A. It as a Request For Comments that is a</p> <p>10 document from the Internet Engineering Task Force, 09:23:41</p> <p>11 IETF, that they use for standardizing protocols.</p> <p>12 I'm unaware of the exact standards placement of --</p> <p>13 or progression of EGP at this time. It's probably</p> <p>14 moved to historic by now.</p> <p>15 Q. When you say it's "moved to historic by 09:24:01</p> <p>16 now," what do you mean by that?</p> <p>17 A. So the IETF has a progression for</p> <p>18 standards, and standards that are no longer actively</p> <p>19 used or recommended are moved to historic to</p> <p>20 indicate that they are no longer productive. 09:24:19</p> <p>21 Q. You also mentioned IGRP. Can you describe</p> <p>22 to me what IGRP is.</p> <p>23 A. IGRP is Cisco's proprietary classful</p> <p>24 protocol.</p> <p>25 Q. When you say Cisco proprietary, what do you 09:24:40</p> <p style="text-align: right;">Page 16</p>
<p>1 Routing.</p> <p>2 Q. Inter-Domain Policy Routing?</p> <p>3 A. Correct. Also, while I was assist admin at</p> <p>4 USC, I was a network administrator, so I had</p> <p>5 familiarity there with EGP and IGRP. 09:21:41</p> <p>6 Q. What is EGP?</p> <p>7 A. Exterior Gateway Protocol.</p> <p>8 Q. And what is IGRP?</p> <p>9 A. Interior Gateway Routing Protocol.</p> <p>10 Q. You mentioned IDPR as part of your postdoc 09:22:06</p> <p>11 work; correct?</p> <p>12 A. Correct.</p> <p>13 Q. Can you describe for me how you worked with</p> <p>14 IDPR in your postdoc work at USC.</p> <p>15 A. So I was working for Deborah Estrin, and 09:22:24</p> <p>16 she was collaborating with Martha Steenstrup of</p> <p>17 Bolt, Beranek & Newman in Boston. They was a --</p> <p>18 they had some sort of research contract to develop a</p> <p>19 routing protocol that supported policy routing.</p> <p>20 Q. Was IDPR a proprietary standard? 09:22:43</p> <p>21 A. I have no idea.</p> <p>22 Q. You said you worked at -- you worked on EGP</p> <p>23 while as a sys admin at USC; is that correct?</p> <p>24 A. That's correct.</p> <p>25 Q. What is EGP? 09:23:07</p> <p style="text-align: right;">Page 15</p>	<p>1 mean by that?</p> <p>2 A. Cisco owns the code, has a patent on the --</p> <p>3 or on the concepts behind the implementation, and as</p> <p>4 far as I know, has not licensed it with the</p> <p>5 exception of licensing their whole source code 09:24:58</p> <p>6 stack.</p> <p>7 Q. How did you work with EGP while you were a</p> <p>8 sys admin?</p> <p>9 A. So I was responsible for maintaining EGP</p> <p>10 connectivity between USC's site and the ARPANET core 09:25:11</p> <p>11 gateways.</p> <p>12 Q. And what was your experience as a sys admin</p> <p>13 working with IGRP?</p> <p>14 A. So I was maintaining the Los Nettos Network</p> <p>15 which was a small regional network in Los Angeles. 09:25:24</p> <p>16 We used IGRP for routing between the sites and our</p> <p>17 small network.</p> <p>18 Q. And what period of time were you a sys</p> <p>19 admin for USC?</p> <p>20 A. Approximately 1983 through 1990. 09:25:36</p> <p>21 Q. Besides IDPR, EGP and IGRP, did you work</p> <p>22 with any other routing protocols while you were</p> <p>23 either obtaining your Ph.D. or serving as a postdoc?</p> <p>24 A. Probably. So I do not recall the details,</p> <p>25 but I do know that we had also a DECnet network, and 09:26:12</p> <p style="text-align: right;">Page 17</p>

<p>1 I believe that DECnet routing was involved, and that</p> <p>2 is a -- uses an internal routing protocol that is</p> <p>3 very simple -- similar to RIP.</p> <p>4 Q. Now, you said DECnet. What is DECnet?</p> <p>5 A. DECnet was a proprietary networking stack 09:26:36</p> <p>6 from Digital Equipment Corporation.</p> <p>7 Q. So the DEC in DECnet stands for</p> <p>8 Digital Equipment Corporation?</p> <p>9 A. Yes.</p> <p>10 Q. When you say "we also had a DECnet 09:26:56</p> <p>11 network," who is "we"?</p> <p>12 A. I was referring to my employers at USC, in</p> <p>13 particular engineering computer services which then</p> <p>14 became university computing services.</p> <p>15 Q. What experience did you have working with 09:27:20</p> <p>16 the DECnet network at USC?</p> <p>17 A. Mostly it was frustrating. The DECnet</p> <p>18 network was interconnecting the router -- the</p> <p>19 various hosts around the campus, allowing students</p> <p>20 and faculty to move data around between the various 09:27:36</p> <p>21 computers.</p> <p>22 Q. What was the operating system like on the</p> <p>23 DECnet network?</p> <p>24 A. So we had multiple systems speaking DECnet.</p> <p>25 There were many VAXes running the VMS operating 09:27:54</p> <p>Page 18</p>	<p>1 A. I do.</p> <p>2 Q. What is a command line interface?</p> <p>3 A. A command line interface is a means for a</p> <p>4 user to enter commands typing out names of words and</p> <p>5 then interacting with a computer by having the 09:29:50</p> <p>6 computer respond to those words.</p> <p>7 Q. If I use the term "CLI," will you</p> <p>8 understand that I'm referring to a command line</p> <p>9 interface?</p> <p>10 A. I understand. 09:30:06</p> <p>11 Q. Did the VAX/VMS operating system have a</p> <p>12 command line interface?</p> <p>13 A. It did.</p> <p>14 Q. Can you describe for me generally how the</p> <p>15 VAX/VMS command line interface worked. 09:30:17</p> <p>16 A. It was a very standard command-and-response</p> <p>17 interface. Predominant were set and show. Change</p> <p>18 parameters and then display parameters.</p> <p>19 Q. When you say "very standard</p> <p>20 command-and-response interface," what do you mean by 09:30:39</p> <p>21 "very standard"?</p> <p>22 A. So very similar to other things in the</p> <p>23 industry.</p> <p>24 Q. At that time?</p> <p>25 A. Yes. 09:30:50</p> <p>Page 20</p>
<p>1 system. We also had several systems running</p> <p>2 TOPS-20.</p> <p>3 Q. You said VAX/VMS. Does that stand for</p> <p>4 anything?</p> <p>5 A. VAX is virtual address extension. VMS is 09:28:15</p> <p>6 virtual memory system.</p> <p>7 Q. How much experience did you have working</p> <p>8 with the VAX/VMS operating system?</p> <p>9 A. I was a system administrator for several</p> <p>10 years while at USC. 09:28:36</p> <p>11 Q. And how many years of experience did you</p> <p>12 have working with the TOPS-20 operating system?</p> <p>13 A. I was only a user of TOPS-20. I got my</p> <p>14 first TOPS-20 account in 1982. I probably used</p> <p>15 that -- well, at least eight years, so . . . 09:29:03</p> <p>16 Q. So as a user, you used TOPS-20 for</p> <p>17 approximately eight years?</p> <p>18 A. Yes.</p> <p>19 Q. And approximately how many years did you</p> <p>20 work as a system administer [sic] for the VAX/VMS 09:29:17</p> <p>21 operating system?</p> <p>22 A. I'm not certain. I believe it was</p> <p>23 approximately 1983 through about 1987.</p> <p>24 Q. Mr. Li, do you know what a command line</p> <p>25 interface is? 09:29:40</p> <p>Page 19</p>	<p>1 Q. And approximately what time period are we</p> <p>2 talking about, Mr. Li?</p> <p>3 A. The first time I saw VMS was '81.</p> <p>4 Q. You mentioned that set and show commands</p> <p>5 were predominant in VAX/VMS; correct? 09:31:13</p> <p>6 A. Mm-hmm.</p> <p>7 Q. Were there any other commands that you</p> <p>8 recall from using the VAX/VMS command line</p> <p>9 interface?</p> <p>10 A. There were many other commands, and you 09:31:25</p> <p>11 could easily extend it by adding additional commands</p> <p>12 to it, so . . .</p> <p>13 Q. How would you extend it by adding</p> <p>14 additional commands to it?</p> <p>15 A. So the entire operating system CLI was 09:31:39</p> <p>16 built around what was called DCL, digital command</p> <p>17 language. You so actually write command definitions</p> <p>18 and add those to the CLI.</p> <p>19 Q. Were you familiar with digital command</p> <p>20 language at the time? 09:32:00</p> <p>21 A. Slightly.</p> <p>22 Q. Did the show commands in VAX/VMS follow any</p> <p>23 particular syntax?</p> <p>24 A. Yes. They typically were invoked by show</p> <p>25 and then usually an object name and then a set of 09:32:16</p> <p>Page 21</p>

<p>1 parameters. The parameters were delineated by a 2 slash and then parameter name. Sometimes there was 3 a value attached with an equal sign and then a value 4 attached to a given parameter. The set commands 5 were pretty much the same way. 09:32:39 6 Q. Now, you said, "typically were invoked" was 7 part of your answer about how show commands worked. 8 Were there any exceptions to the syntax you 9 just described? 10 A. Well, that was very much a generalization, 09:32:58 11 so yes. 12 Q. What was the command syntax like for 13 TOPS-20? 14 A. TOPS-20 had a command syntax that was 15 somewhat similar to VMS. The notable difference was 09:33:22 16 that TOPS-20 allowed for a command completion, and 17 so you could use escape and tab and question mark 18 characters to interact directly with the command 19 line interpreter while you were typing a command 20 line. 09:33:42 21 Q. What type -- what time period are you 22 talking about here, Mr. Li? 23 A. I am unaware of when TOPS-20 first came 24 out. 25 Q. At what time period were you working with 09:33:54 Page 22</p>	<p>1 feature while you were working with TOPS-20? 2 A. Yes. 3 Q. Is the recollection you just described 4 based upon your hands-on experience with TOPS-20? 5 A. Yes, it is. 09:35:27 6 Q. Now, you said TOPS-20 had a similar syntax 7 to VMS. 8 What was similar about the TOPS-20 command 9 syntax to the VAX/VMA command syntax? 10 A. Again, the general intent of -- or design 09:35:58 11 of the -- in the language was an imperative language 12 where they would design it as verb and then noun, 13 noun. So you would give the command as SHO and then 14 some parameters to go with it. 15 The details of the syntax were definitely 09:36:23 16 different. TOPS-20 in particular never used a slash 17 as a parameter separator. 18 Q. Now, you've used the word "parameter" to 19 describe the syntax for both VAX/VMS and TOPS-20? 20 A. Mm-hmm. 09:36:46 21 Q. What do you mean by a parameter? 22 A. It's a qualifier or other conditional 23 information about the specific request. 24 Q. Can you give me an example of what would be 25 a command parameter? 09:36:56 Page 24</p>
<p>1 TOPS-20? 2 A. Again, I got my first TOPS-20 account in 3 1982. 4 Q. Okay. So these features you just 5 described, command completion, were those in TOPS-20 09:34:05 6 when you first got your account in 1982? 7 A. Yes. 8 Q. What is command completion? 9 A. Command completion is the ability for the 10 command line interpreter to infer from what the user 09:34:25 11 has typed as a partial command and then actually 12 have it type out the rest of the command for the 13 user. 14 Q. Can you give me an example of how command 15 completion would work in a TOPS-20 command line 09:34:41 16 interface. 17 A. Oh, dear. So not accurately. 18 Approximately, you would type a partial command. So 19 for example, if you were to type "SHO," S-H-O, and 20 then complete it, you would get the W and then a 09:34:58 21 space, so you could then enter a parameter. 22 MR. PAK: I'm going to object that this 23 calls for expert testimony. Speculation. 24 BY MR. WONG: Q. Mr. Li, did you use the 25 command -- did you use the command completion 09:35:17 Page 23</p>	<p>1 A. For example, if the database of files had a 2 set of file names, you could give a directory 3 command which would show the files in the directory. 4 Then you could also give directory followed by a 5 parameter which would explain -- which would specify 09:37:17 6 some subset of the files that you would like to see. 7 Q. Besides VAX/VMS and TOPS-20, did you have 8 experience with any other command line interfaces? 9 A. Many. 10 Q. Okay. What other command line interfaces 09:37:43 11 do you have experience with, Mr. Li? 12 A. That could take a while. CPM, VMCMS. 13 Let's see. Concurrent CPM, MS-DOS, RSX-11M. 14 Probably many others. 15 Q. Which of those existed prior to 1985? 09:38:15 16 A. All of those. 17 Q. Did any of those exist prior to 1980? 18 A. Yes, very definitely. Let's see. UNIX 19 already existed. There was a CLI there. I believe 20 that CPM predates 1980. 09:38:38 21 Q. And did you work directly with all of the 22 command line interfaces that you just recited? 23 A. Yes. 24 Q. In what capacity did you work with those 25 command line interfaces? 09:39:02 Page 25</p>

[illegible][illegible]


25 MR. PAK: Objection. Objection. Vague. 01:32:59

[illegible][illegible]

01:45:12

<p>1 standards organization like IETF?</p> <p>2 A. I have never seen anyone do that. I have</p> <p>3 never seen Cisco have any UI patents; so I don't</p> <p>4 understand.</p> <p>5 Q. Mr. Li, is there any other views or 04:15:36</p> <p>6 opinions that you have with respect to this case</p> <p>7 that you have not shared with us on the record that</p> <p>8 you would like to share with us now?</p> <p>9 MR. WONG: Objection. Vague.</p> <p>10 THE WITNESS: I don't understand your 04:15:55</p> <p>11 question.</p> <p>12 BY MR. PAK: Q. We talked about a lot of</p> <p>13 different topics. I'm giving you the opportunity to</p> <p>14 provide any further testimony that you would like on</p> <p>15 any of these topics if you'd like it. 04:16:05</p> <p>16 A. So I don't understand what intellectual</p> <p>17 property people think there is in some CLI syntax.</p> <p>18 The intellectual property is -- that's of</p> <p>19 significance gets covered in patents. If we thought</p> <p>20 it was worth protecting, we would copyright it. We 04:16:22</p> <p>21 would patent it.</p> <p>22 MR. WONG: Object to the form of the</p> <p>23 question.</p> <p>24 BY MR. PAK: Q. Do you believe that</p> <p>25 copyright is a form of intellectual property? 04:16:34</p> <p>Page 254</p>	<p>1 THE VIDEOGRAPHER: Okay. This marks the</p> <p>2 end of DVD No. 4 in the deposition of Anthony Li.</p> <p>3 Going off the record. The time is 4:17. 04:17:29</p> <p>4 (TIME NOTED: 4:17 p.m.)</p> <p>5 --o0o--</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>Page 256</p>
<p>1 MR. WONG: Objection. Calls for opinion</p> <p>2 testimony.</p> <p>3 THE WITNESS: It calls for legal testimony.</p> <p>4 I don't understand.</p> <p>5 BY MR. PAK: Q. What is your understanding 04:16:44</p> <p>6 of copyright law?</p> <p>7 MR. WONG: Same objection.</p> <p>8 THE WITNESS: Vague as best.</p> <p>9 BY MR. PAK: Q. I take it, sir, that you</p> <p>10 haven't analyzed any copyright laws relating to 04:16:56</p> <p>11 interface, APIs, user interfaces?</p> <p>12 A. I know that I'm supposed to put a copyright</p> <p>13 notice in the top of every source code file. That's</p> <p>14 about all I know.</p> <p>15 Q. Okay. 04:17:08</p> <p>16 A. I can't even tell you for certain what I'm</p> <p>17 supposed to put in the top of the file because</p> <p>18 nobody can tell me exactly how I should deal with</p> <p>19 multiple years.</p> <p>20 MR. PAK: Thank you. Sir, I think those 04:17:18</p> <p>21 are the questions I have for you today.</p> <p>22 MR. WONG: I have no further questions.</p> <p>23 ////</p> <p>24</p> <p>25</p> <p>Page 255</p>	<p>1 I, ANTHONY J. LI, do hereby declare under</p> <p>2 penalty of perjury that I have read the foregoing</p> <p>3 transcript; that I have made any corrections as appear</p> <p>4 noted, in ink, initialed by me, or attached hereto; that</p> <p>5 my testimony as contained herein, as corrected, is true</p> <p>6 and correct.</p> <p>7 Executed this _____ day of _____,</p> <p>8 2016, at _____,</p> <p>9 (city) (state)</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15 _____</p> <p>16 ANTHONY J. LI</p> <p>17 Volume I</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>Page 257</p>

CONFIDENTIAL INFORMATION UNDER THE PROTECTIVE ORDER

<p>1 I, the undersigned, a Certified Shorthand 2 Reporter of the State of California, do hereby 3 certify: 4 That the foregoing proceedings were taken 5 before me at the time and place herein set forth; 6 that any witnesses in the foregoing proceedings, 7 prior to testifying, were administered an oath; that 8 a record of the proceedings was made by me using 9 machine shorthand which was thereafter transcribed 10 under my direction; that the foregoing transcript is 11 a true record of the testimony given. 12 Further, that if the foregoing pertains to 13 the original transcript of a deposition in a Federal 14 Case, before completion of the proceedings, review 15 of the transcript [X] was [] was not requested. 16 I further certify I am neither financially 17 interested in the action nor a relative or employee 18 of any attorney or any party to this action. 19 IN WITNESS WHEREOF, I have this date 20 subscribed my name. 21 Dated: February 3, 2016 22 23 24  Susan F. Magee 25 CSR No. 11661, RPR, CCRR, CLR</p>	

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

CISCO SYSTEMS, INC.,)
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Plaintiff,)
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ARISTA NETWORKS, INC.,)
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Defendant.)
_____)

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

VIDEOTAPED DEPOSITION OF KIRK LOUGHEED
Palo Alto, California
Friday, November 20, 2015
Volume I

Reported by:
CARLA SOARES
CSR No. 5908
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Pages 1 - 189

Page 3

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
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Plaintiff,)
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ARISTA NETWORKS, INC.,)
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Defendant.)
_____)

VIDEOTAPED DEPOSITION OF KIRK LOUGHEED,
Volume I, taken on behalf of Defendant, at
650 Page Mill Road, Palo Alto, California, beginning
at 9:19 a.m., and ending at 6:15 p.m., on Friday,
November 20, 2015, before CARLA SOARES, Certified
Shorthand Reporter No. 5908.

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--o0o--

Page 109	Page 111
<p>1 reveal -- basically mostly status commands and ones 14:27:53</p> <p>2 for handling connections over the network to other</p> <p>3 hosts, sort of a subset of the -- of the terminal</p> <p>4 server commands.</p> <p>5 Q And you said you chose the term "EXEC," 14:28:26</p> <p>6 that's E-X-E-C; is that right?</p> <p>7 A Yes.</p> <p>8 Q You chose that term, yes?</p> <p>9 A Yes.</p> <p>10 Q How did you come up with that term? 14:28:39</p> <p>11 A Well, I had a number of possible ways of</p> <p>12 describing it. I could have used "shell" after</p> <p>13 the -- modeling it along the UNIX way of -- UNIX</p> <p>14 equivalent.</p> <p>15 From -- I decided EXEC in sort of -- you 14:29:15</p> <p>16 know, inspired by the TOPS-20 command processor.</p> <p>17 You know, calling it the command processor would</p> <p>18 have been another possibility.</p> <p>19 There was a number of possibilities that I</p> <p>20 could have called it, what I could have called that 14:29:38</p> <p>21 particular part of the software, and I ended up</p> <p>22 choosing EXEC.</p> <p>23 Q Now, were you responsible for determining</p> <p>24 the prompt symbol on the interface?</p> <p>25 I'm sorry. Let me be clear. 14:30:26</p>	<p>1 bracket prompt? 14:33:02</p> <p>2 A Router name, close angle bracket.</p> <p>3 Q Right.</p> <p>4 A Yes, I chose that.</p> <p>5 Q Okay. How did you come to choose that? 14:33:09</p> <p>6 A Well, there were -- when you have multiple</p> <p>7 devices on a network, one of the first things you</p> <p>8 want to know if you're typing at something is to</p> <p>9 what you are typing at. So that -- sort of the most</p> <p>10 aesthetic choice was the -- was the name of the 14:33:51</p> <p>11 device.</p> <p>12 And the angle bracket was a nice visual</p> <p>13 way of terminating -- you know, here's where your</p> <p>14 type-in begins. Here's where the prompt ends,</p> <p>15 here's where the type-in begins. 14:34:19</p> <p>16 Q Had you ever seen the angle bracket used</p> <p>17 as a prompt in any other system?</p> <p>18 A I wasn't aware of any generally available</p> <p>19 host -- general purpose timesharing that actually</p> <p>20 that was the default, that was the prompt. 14:34:56</p> <p>21 Q I'm not sure what you mean by that.</p> <p>22 But had you ever seen any system that used</p> <p>23 a close angle bracket as a prompt?</p> <p>24 A No. TOPS-20 used an "at" sign and UNIX</p> <p>25 used a percent sign. 14:35:19</p>
Page 110	Page 112
<p>1 I'm talking about on the interface line, 14:30:28</p> <p>2 there are symbols that precede the input point, such</p> <p>3 as a hash sign, for example, right?</p> <p>4 A So for -- I was responsible for choosing</p> <p>5 the prompts for the command line interface, for the 14:30:45</p> <p>6 CLI.</p> <p>7 Q Okay. And tell me what those prompts are,</p> <p>8 the various prompts that the Cisco CLI uses.</p> <p>9 A There are many right now. But at the time</p> <p>10 there was the -- the unprivileged EXEC commands, and 14:31:09</p> <p>11 that was the host name of the -- of the router or --</p> <p>12 of the router, followed by a close angle bracket.</p> <p>13 There was a privileged mode, and it</p> <p>14 changed that prompt to a hash mark.</p> <p>15 And in the initial implementation of 14:31:55</p> <p>16 configuration mode, there was no prompt.</p> <p>17 Q Okay. How did you choose the hash prompt</p> <p>18 for the privileged mode?</p> <p>19 A It was visually large and different than</p> <p>20 the -- different -- just different than the 14:32:25</p> <p>21 unprivileged EXEC prompt.</p> <p>22 Q Okay. How did you use the unprivileged</p> <p>23 close angle bracket prompt?</p> <p>24 A I don't understand your question.</p> <p>25 Q Did you choose to use the close angle 14:32:59</p>	<p>1 Q And you're not aware of any use of a hash 14:35:22</p> <p>2 sign as a prompt?</p> <p>3 A Not to my recollection.</p> <p>4 Q You were familiar with UNIX in the mid</p> <p>5 1980s, right? 14:36:18</p> <p>6 A As a user of UNIX.</p> <p>7 Q And -- by the way, are you familiar with</p> <p>8 Linux?</p> <p>9 A Only as a user.</p> <p>10 Q When did you first become familiar with 14:36:38</p> <p>11 Linux?</p> <p>12 A With Linux? I think I first heard mention</p> <p>13 of it in the late '90s.</p> <p>14 Q Did Cisco come up with the nomenclature of</p> <p>15 calling a mode "privileged," to your knowledge? 14:38:02</p> <p>16 A I don't believe -- I don't believe Cisco</p> <p>17 came up with that terminology.</p> <p>18 Q Let me turn to the current set of IOS CLI</p> <p>19 commands.</p> <p>20 I don't expect an exact number, but do you 14:38:54</p> <p>21 know approximately how many IOS CLI commands there</p> <p>22 are today?</p> <p>23 A I would have to guess. It is a -- it's a</p> <p>24 very large number.</p> <p>25 Q Can you just give me a ballpark? 14:39:15</p>

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1 THE VIDEO OPERATOR: Going off the record, 14:58:06
 2 the time is 2:58 p.m.
 3 (Recess, 2:58 p.m. - 3:24 p.m.)
 4 THE VIDEO OPERATOR: Back on the record.
 5 The time is 3:24 p.m. 15:24:02
 6 BY MR. FERRALL:
 7 Q Mr. Lougheed, when did you first become
 8 aware of DOS, D-O-S?
 9 A I'd say whose DOS?
 10 Q MS-DOS. 15:24:36
 11 A MS-DOS? I probably heard about it when
 12 IBM announced the IBM PC.
 13 Q Do you recall that MS-DOS uses a close
 14 angle bracket as a prompt?
 15 A Now that you remind me, it does. 15:25:16
 16 Q Do you think you might have been inspired
 17 by that prompt when you chose the close angle
 18 bracket for Cisco's prompt?
 19 A No. I was not a DOS user.
 20 Q So it's just a coincidence that you and 15:25:34
 21 DOS came up with the same prompt, to your knowledge?
 22 MR. NEUKOM: Objection. Asked and
 23 answered.
 24 THE WITNESS: I was not a DOS user. I
 25 first -- I was not a DOS user. 15:26:06

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1 MR. FERRALL: Let's mark this as the next 15:26:35
 2 exhibit.
 3 (Exhibit 38 was marked for identification
 4 and is attached hereto.)
 5 BY MR. FERRALL: 15:26:37
 6 Q Exhibit 38 is a set of emails between you
 7 and Mr. Remaker, among others. It bears control
 8 numbers CSI-ANI-00043306.
 9 A Okay. I'd like to read this.
 10 Q First let me ask you the question so you 15:27:19
 11 know what to look for.
 12 A I will forget the question by the time I'm
 13 done reading this.
 14 Q Well, Mr. Lougheed, that's not the way it
 15 works, actually. I ask the question and you answer 15:27:28
 16 it.
 17 A Okay.
 18 Q If you can't answer it, then you tell me.
 19 My only question is, did you send the
 20 email that's at the top of Exhibit 38, the one at 15:27:38
 21 12-11-2008 at 10:14 p.m.?
 22 MR. NEUKOM: Mischaracterizes the document
 23 on its face.
 24 And I know that Mr. Ferrall would like you
 25 to feel comfortable to read the page-and-a-half 15:27:54

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1 document that he's just put in front of you before 15:27:57
 2 answering his question.
 3 THE WITNESS: Okay. I'll read it.
 4 MR. FERRALL: Actually, no, I would like
 5 him to answer the question. 15:28:03
 6 Q Are you telling me you can't tell me
 7 whether you sent the email?
 8 MR. NEUKOM: It's a totally unfair
 9 question. The email that he sent would necessarily
 10 include everything that follows. 15:28:10
 11 If you want him to tell you whether he
 12 remembers this or whether he sent it, let him read
 13 the document. Come on, Brian.
 14 It's a page and a half. We're not talking
 15 about him wasting 30 minutes to read a product 15:28:20
 16 manual. It's a page-and-a-half email. The witness
 17 has said he wants to read it, and we're going to let
 18 him read it.
 19 THE WITNESS: Okay. I've read it.
 20 BY MR. FERRALL: 15:29:28
 21 Q Okay. Did you send this email that's
 22 dated December 11, 2008, at 10:14 p.m.?
 23 A I believe I did.

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1 [REDACTED]
 2 [REDACTED]
 3 [REDACTED]
 4 [REDACTED]
 5 [REDACTED]
 6 [REDACTED]
 7 [REDACTED]
 8 [REDACTED]
 9 [REDACTED]
 10 [REDACTED]
 11 [REDACTED]
 12 [REDACTED]
 13 [REDACTED]
 14 [REDACTED]
 15 [REDACTED]

16 A There developed a need or a desire to
 17 change some of the fundamental timing constants
 18 of -- I think first was the IGRP routing protocol,
 19 and I implemented a command that allowed those
 20 timers to be user-configured. 18:12:59

21 And later on I or someone else extended
 22 that to the RIP timers so customers could speed up
 23 or slow down the pulse of routing updates.

24 Q And when did that occur?

25 A 1988 or 1989. 18:13:36

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1 Q How did you choose the term -- the words 18:13:39
 2 "timers basic" for this function?

3 A I don't remember where "basic" came from.
 4 But using the keyword "timers" was my -- was my
 5 introduction, was my creation. 18:14:00

6 MR. NEUKOM: Counsel, I believe we're now
 7 beyond seven hours.

8 MR. FERRALL: Okay. Well, I -- given
 9 Mr. Loughheed's tenure at Cisco, I thank him for his
 10 time, but I will say I think we deserve some more 18:14:22
 11 time with him.

12 But I understand seven hours is up and
 13 you're going to say enough is enough for today I
 14 take it; is that right?

15 MR. NEUKOM: Certainly for today for the 18:14:31
 16 sake of the witness. And we will respectfully
 17 disagree with the idea that counsel needs more than
 18 seven hours --

19 MR. FERRALL: Okay.

20 MR. NEUKOM: -- needs more than today. 18:14:41
 21 But we can discuss that for another day.

22 In the meantime, I should note for the
 23 record the witness reserves the right to review the
 24 transcript and make corrections.

25 Brian, I'm not sure I did that for 18:14:51

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1 Mr. Tjong. If you're okay with it, I'd like to just 18:14:53
 2 do a stipulation across the case that both sides
 3 have the 30-day review and errata right for all
 4 transcripts regardless whether counsel puts it on
 5 the record at the depo as a two-way street. 18:15:04

6 MR. FERRALL: That's fine. I thought it
 7 existed as a matter of procedure anyway. So that's
 8 fine.

9 MR. NEUKOM: I hope you're right, but glad
 10 to have the stipulation, even if it's unnecessary. 18:15:17

11 MR. FERRALL: Okay.

12 MR. NEUKOM: Thanks very much.

13 THE VIDEO OPERATOR: This concludes
 14 today's videotaped deposition of Mr. Kirk Loughheed.
 15 We're off the record at 6:15 p.m. Thank you. 18:15:25
 16 (TIME NOTED: 6:15 p.m.)

17 --o0o--

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1
 2
 3
 4
 5
 6
 7
 8
 9 I, KIRK LOUGHEED, do hereby declare under
 10 penalty of perjury that I have read the foregoing
 11 transcript; that I have made any corrections as
 12 appear noted, in ink, initialed by me, or attached
 13 hereto; that my testimony as contained herein, as
 14 corrected, is true and correct.

15 EXECUTED this _____ day of _____,
 16 2015, at _____, _____.
 17 (City) (State)

18
 19
 20 KIRK LOUGHEED
 21
 22
 23
 24
 25

1 I, the undersigned, a Certified Shorthand
2 Reporter of the State of California, do hereby
3 certify:

4 That the foregoing proceedings were taken
5 before me at the time and place herein set forth;
6 that any witnesses in the foregoing proceedings,
7 prior to testifying, were administered an oath; that
8 a record of the proceedings was made by me using
9 machine shorthand which was thereafter transcribed
10 under my direction; that the foregoing transcript is
11 a true record of the testimony given.

12 Further, that if the foregoing pertains to
13 the original transcript of a deposition in a Federal
14 Case, before completion of the proceedings, review
15 of the transcript [X] was [] was not requested.

16 I further certify I am neither financially
17 interested in the action nor a relative or employee
18 of any attorney or any party to this action.

19 IN WITNESS WHEREOF, I have this date
20 subscribed my name.

21
22 Dated: 11/25/2015

23
24 <%signature%>
25 CARLA SOARES

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

CISCO SYSTEMS, INC. Case No.: 5:14-cv-05344-BLF (PSG)

Plaintiff,

v.

ARISTA NETWORKS, INC.

Defendants.

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VIDEOTAPED DEPOSITION OF KIRK LOUGHEED

Palo Alto, California

Monday, April 4, 2016

Volume 2

Reported by:

LESLIE JOHNSON

RPR, CSR No. 11451

Job No.: 2285024

PAGES 190 - 399

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<p>1 January 26, 1983. 2 BY MR. WONG: 3 Q. So Mrs. Yates was the human resources 4 director for the Stanford electrical engineering 5 department as of January 1983, correct? 6 A. Correct. 7 Q. What was your understanding of what you 8 were signing when you signed the first page of 9 Exhibit 454? 10 A. I believe my understanding at the time was 11 that if I came up with something patentable that 12 Stanford had the rights to it. 13 Q. Turn to the next page of Exhibit 454, 14 please. 15 MR. NEUKOM: And I'll object to that last 16 question as calling for a legal conclusion or 17 understanding. 18 BY MR. WONG: 19 Q. Are you there? 20 A. I'm on the next page. 21 Q. Can you -- strike that. 22 What is the second page of Exhibit 454? 23 A. It's titled personnel requisition, and it 24 is dated July 1st, 1980. 25 Q. And is this personnel requisition for a</p> <p style="text-align: right;">Page 211</p>	<p>1 assembly language, correct? 2 A. Correct. 3 Q. And I note that this document appears to 4 show your social security number, Mr. Loughheed. So 5 I think it would be appropriate, at least for this 6 document, to mark that as "Highly Confidential." 7 A. I would extremely appreciate that. 8 MR. NEUKOM: I think it already is, isn't 9 it? 10 MR. WONG: It is, the transcript? 11 MR. NEUKOM: Oh, this document, the 12 transcript. 13 MR. WONG: Well, just to make sure that -- 14 well, maybe not the transcript, but I think the 15 document should certainly be treated that way. 16 MR. NEUKOM: So the document was produced 17 with a Bates stamp "Highly Confidential - Attorneys' 18 Eyes Only." 19 MR. WONG: Oh, yes. 20 MR. NEUKOM: But while we're at it, in an 21 excess of caution, on behalf of Mr. Loughheed and 22 also on behalf of Cisco, we will mark the 23 transcript, as Mr. Wong suggests, as "Highly 24 Confidential" and "Attorneys' Eyes Only." And we 25 ask the court reporter and the videographer to</p> <p style="text-align: right;">Page 213</p>
<p>1 particular job title? 2 A. Yes. 3 Q. Okay. Do you know the purpose of this 4 document on the second page of Exhibit 454? 5 A. It was a requisition form prepared by 6 Ralph Gorin to hire me as a systems programmer. 7 Q. And as of July 1st, 1980, were you already 8 employed by Stanford? 9 A. I believe so. 10 Q. So was this personnel requisition relating 11 to a new job that you were trying to get at 12 Stanford? 13 A. This was the personnel requisition for my 14 first job at Stanford. 15 Q. Approximately two-thirds of the way down 16 on the second page of Exhibit 454, do you see a 17 section called "Qualifications"? 18 A. Yes, I do. 19 Q. And the first sentence underneath 20 "Qualifications" says "Previous TOPS-20 assembly 21 language program experience is essential." 22 Do you see that? 23 A. Correct. 24 Q. And you had, at the time of this document 25 in 1980, previous experience with the TOPS-20</p> <p style="text-align: right;">Page 212</p>	<p>1 please mark all copies accordingly. 2 MR. WONG: Just so the record is clear, 3 I'm not suggesting that the entire transcript be 4 marked "Highly Confidential - Attorneys' Eyes Only." 5 My concern, of course, is with your personal private 6 information. 7 MR. NEUKOM: I'm not going to hold it 8 against you as a blanket concession. I think the 9 practice that we've gotten into, at least in some 10 depositions, is when we make a designation, we make 11 the designation apply to the whole transcript and 12 then have a reasonable conversation thereafter about 13 dedesignations. 14 MR. WONG: Sure. 15 BY MR. WONG: 16 Q. Mr. Loughheed, can you turn to the page of 17 Exhibit 454 where the control number at the bottom 18 ends in 875. 19 Are you there? 20 A. I'm there. 21 Q. And what is the document that ends in 22 control number 875? 23 A. A copy of my résumé. 24 Q. Okay. And it's a copy of a résumé as of 25 December 1st, 1982, correct?</p> <p style="text-align: right;">Page 214</p>

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<p>1 A. That's correct.</p> <p>2 Q. And is the information in this copy of</p> <p>3 your résumé dated December 1st, 1982 accurate, to</p> <p>4 the best of your knowledge?</p> <p>5 A. To the best of my knowledge, yes.</p> <p>6 Q. Can you take a second to skim the contents</p> <p>7 and let me know if you see anything in there that is</p> <p>8 erroneous.</p> <p>9 A. Okay. I have -- I have examined it.</p> <p>10 Q. And did you see anything in the résumé,</p> <p>11 dated December 1st, 1982, in Exhibit 454 that needs</p> <p>12 to be corrected for the record?</p> <p>13 A. No.</p> <p>14 Q. The résumé we're looking at in Exhibit 454</p> <p>15 mentions DECSYSTEM-2060 computers.</p> <p>16 Do you see that?</p> <p>17 A. Yes.</p> <p>18 Q. In your prior deposition, Mr. Lougheed,</p> <p>19 you referenced working on DECSYSTEM-20 systems while</p> <p>20 you were employed at Stanford.</p> <p>21 Do you remember that?</p> <p>22 A. Yes.</p> <p>23 Q. Just so the record is clear, are the</p> <p>24 DECSYSTEM-20 systems the same thing as the</p> <p>25 DECSYSTEM-2060 computers that are referenced in the</p> <p style="text-align: right;">Page 215</p>	<p>1 A. Yes.</p> <p>2 Q. And under "Qualifications" about</p> <p>3 two-thirds of the way down on the page ending in</p> <p>4 control numbers 877 on Exhibit 454, do you see the</p> <p>5 section titled "Qualifications"?</p> <p>6 A. Yes, I do.</p> <p>7 Q. And below that it says "Prior experience</p> <p>8 in the details of the DECSYSTEM-20 computer system</p> <p>9 and its operation is mandatory."</p> <p>10 Do you see that?</p> <p>11 A. I see that sentence.</p> <p>12 Q. What is the date of the personnel</p> <p>13 requisition form ending in control numbers 877 on</p> <p>14 Exhibit 454?</p> <p>15 A. There are a number of dates on this</p> <p>16 document. There is a date needed, which was</p> <p>17 1/16/83, which was apparently approved 1/10/83.</p> <p>18 There's a -- maybe a few other dates floating around</p> <p>19 here, but it's that time frame.</p> <p>20 Q. As of this time frame, January 1983, you</p> <p>21 had extensive experience in the details of the</p> <p>22 DECSYSTEM-20 computer system and its operation,</p> <p>23 correct?</p> <p>24 A. Correct.</p> <p>25 Q. And you also had knowledge of TOPS-20 as</p> <p style="text-align: right;">Page 217</p>
<p>1 December 1st, 1982 résumé in Exhibit 454?</p> <p>2 A. They are -- they're the same thing.</p> <p>3 They're different model numbers of what is</p> <p>4 essentially the same machine.</p> <p>5 Q. Thank you. If you turn to the page ending</p> <p>6 in control numbers 877 in Exhibit 454.</p> <p>7 A. Yes.</p> <p>8 Q. This is another personnel requisition,</p> <p>9 correct?</p> <p>10 A. It looks to be so, yes.</p> <p>11 Q. What is the difference between this</p> <p>12 personnel requisition on the page ending in control</p> <p>13 numbers 877 and the one that we were looking at</p> <p>14 earlier on page ending with 873?</p> <p>15 MR. NEUKOM: Objection. The document</p> <p>16 speaks for itself.</p> <p>17 THE WITNESS: The first was a personnel</p> <p>18 requisition for the Stanford low overhead</p> <p>19 time-sharing facility. This is a personnel</p> <p>20 requisition for the electrical engineering</p> <p>21 department's computer facilities.</p> <p>22 BY MR. WONG:</p> <p>23 Q. And the electrical engineering</p> <p>24 department's computer facilities department, is that</p> <p>25 the same thing as EE-CF?</p> <p style="text-align: right;">Page 216</p>	<p>1 of January of 1983, correct?</p> <p>2 A. Correct.</p> <p>3 Q. What is MACRO-20?</p> <p>4 A. That is the assembly language that was</p> <p>5 used to do the systems programming for a</p> <p>6 DECSYSTEM-20.</p> <p>7 Q. And as of January 1983, you were familiar</p> <p>8 with MACRO-20 as well, correct?</p> <p>9 A. Correct.</p> <p>10 Q. You were also familiar with ethernet as of</p> <p>11 January 1983, correct?</p> <p>12 A. Correct.</p> <p>13 Q. At the top of this same page that we're</p> <p>14 looking at here ending in control numbers 877 of</p> <p>15 Exhibit 454, there is a name Steve Hansen.</p> <p>16 Do you see that?</p> <p>17 A. I see that.</p> <p>18 Q. And Mr. Hansen was your supervisor in the</p> <p>19 EE-CF department; is that correct?</p> <p>20 A. That's correct.</p> <p>21 Q. If you skip ahead to the page ending in</p> <p>22 control numbers 883 in Exhibit 454. Let me know</p> <p>23 when you're there.</p> <p>24 A. I'm there.</p> <p>25 Q. What is depicted on the page ending in</p> <p style="text-align: right;">Page 218</p>

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<p>1 control numbers 883 on Exhibit 454?</p> <p>2 A. An organizational chart of the electrical</p> <p>3 engineering computer facility.</p> <p>4 Q. And do you know approximately when this</p> <p>5 organizational chart was accurate in terms of year?</p> <p>6 Let me rephrase the question.</p> <p>7 What time frame does this organizational</p> <p>8 chart represent?</p> <p>9 A. I am not absolutely sure, but I suspect</p> <p>10 it's 1985.</p> <p>11 Q. And why do you suspect it's 1985?</p> <p>12 A. Looking at the people that are mentioned</p> <p>13 on the org chart, especially the systems</p> <p>14 programmers, I think it was in 1985 is when I hired</p> <p>15 some of those people.</p> <p>16 Q. And one of the systems programmers listed</p> <p>17 on this page is Greg Satz, correct?</p> <p>18 A. Correct.</p> <p>19 Q. And Mr. Satz later worked for Cisco,</p> <p>20 correct?</p> <p>21 A. Correct.</p> <p>22 Q. Mr. Satz didn't leave Stanford's</p> <p>23 employment at the same time you did; is that</p> <p>24 correct, Mr. Loughheed?</p> <p>25 A. That is correct.</p> <p style="text-align: right;">Page 219</p>	<p>1 MR. NEUKOM: Objection. Mischaracterizes</p> <p>2 the document.</p> <p>3 BY MR. WONG:</p> <p>4 Q. You can answer.</p> <p>5 A. I don't remember.</p> <p>6 Q. On the second page of this letter, the</p> <p>7 page of the exhibit ending in control numbers 884,</p> <p>8 the second paragraph on that page?</p> <p>9 A. Uh-huh.</p> <p>10 Q. The last sentence says, "Mr. Loughheed has</p> <p>11 been one of, if not the person responsible for</p> <p>12 installing and maintaining most of the department's</p> <p>13 EtherTip systems that give the user -- users</p> <p>14 computer terminal access to all of the systems on</p> <p>15 the SUNet."</p> <p>16 Do you see that?</p> <p>17 A. I do.</p> <p>18 Q. Did I read that correctly?</p> <p>19 A. You read it correctly.</p> <p>20 Q. Would you agree that you were the person</p> <p>21 most responsible for installing and maintaining most</p> <p>22 of the department's EtherTIP systems?</p> <p>23 A. I think Mr. Hansen was being effusive.</p> <p>24 There were many other people that were -- I had</p> <p>25 responsibility for making sure that they worked.</p> <p style="text-align: right;">Page 221</p>
<p>1 Q. If you turn to the page ending in control</p> <p>2 number 885 in the same exhibit.</p> <p>3 Are you there?</p> <p>4 A. Yes.</p> <p>5 Q. Now, this is how the document was produced</p> <p>6 to us, but I believe the second page of the letter</p> <p>7 that starts on control number 885 is actually the</p> <p>8 prior page. Could you take a moment, please, and</p> <p>9 skim the letter that starts on --</p> <p>10 A. Okay.</p> <p>11 Q. -- that page?</p> <p>12 A. I will -- I will read through it.</p> <p>13 Okay. I've read through it.</p> <p>14 Q. Can you please describe what is the</p> <p>15 document that starts on the page ending in control</p> <p>16 numbers 885 and ends on page 884 of Exhibit 454?</p> <p>17 A. It's a page -- it's a memo from Steve</p> <p>18 Hansen, my supervisor, to Beverly Yates, who was the</p> <p>19 HR person, basically recommending that my job</p> <p>20 classification be upgraded.</p> <p>21 Q. And the date of this letter is June 5th,</p> <p>22 1985?</p> <p>23 A. That's what it says.</p> <p>24 Q. Did you ask Mr. Hansen to write this</p> <p>25 recommendation for you?</p> <p style="text-align: right;">Page 220</p>	<p>1 But there were many other people involved in the</p> <p>2 actual details of pulling cables and installing</p> <p>3 equipment and the like.</p> <p>4 Q. If you turn to the page of the same</p> <p>5 exhibit ending in control numbers 886, let me know</p> <p>6 when you're there.</p> <p>7 A. Yeah.</p> <p>8 Q. My question has to do with the first</p> <p>9 paragraph under the "Description" portion of this</p> <p>10 page starting with "The Electrical Engineering</p> <p>11 Computer Facility Administration."</p> <p>12 Do you see that paragraph?</p> <p>13 A. Yes.</p> <p>14 Q. The last paragraph -- strike that.</p> <p>15 The last sentence of that paragraph says,</p> <p>16 "At present, EE-CF has full responsibility for one</p> <p>17 DECSYSTEM-20 mainframe, six VAX-11/780</p> <p>18 super-minicomputers, and partial responsibility for</p> <p>19 four VAX-11/750 minicomputers."</p> <p>20 Do you see that?</p> <p>21 A. Uh-huh.</p> <p>22 Q. Did I read that correctly?</p> <p>23 A. Yes, you read that correctly.</p> <p>24 Q. And what are VAX-11/780</p> <p>25 super-minicomputers?</p> <p style="text-align: right;">Page 222</p>

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<p>1 A. A type of computer manufactured by the</p> <p>2 Digital Equipment Corporation.</p> <p>3 Q. And Digital Equipment Corporation is also</p> <p>4 known as DEC, right?</p> <p>5 A. Correct.</p> <p>6 Q. And did you work with these DEC VAX</p> <p>7 super-minicomputers while an employee at Stanford?</p> <p>8 A. One of the -- actually, at least two of</p> <p>9 the systems programmers were the ones that were</p> <p>10 primarily responsible for making sure that those</p> <p>11 systems ran properly.</p> <p>12 Q. Was Mr. Satz one of those systems</p> <p>13 programmers that --</p> <p>14 A. Yes.</p> <p>15 Q. -- worked with the VAX system?</p> <p>16 A. Yes.</p> <p>17 Q. Is the answer the same for the VAX-11/750</p> <p>18 super-minicomputers?</p> <p>19 A. Yes.</p> <p>20 Q. Did those VAX machines have a command-line</p> <p>21 interface?</p> <p>22 MR. NEUKOM: Objection. Vague.</p> <p>23 BY MR. WONG:</p> <p>24 Q. Did the VAX-11/780 systems have a</p> <p>25 command-line interface?</p> <p style="text-align: right;">Page 223</p>	<p>1 Q. And the first full sentence of that bullet</p> <p>2 point says, "Supervised a computer science</p> <p>3 department electronics design engineer in the</p> <p>4 hardware debugging of a DEC-20 to ethernet</p> <p>5 interface."</p> <p>6 The next sentence says, "I also wrote the</p> <p>7 interface's control microcode, the hardware</p> <p>8 diagnostics, and the operating system support for</p> <p>9 the device."</p> <p>10 Do you see that?</p> <p>11 A. I do.</p> <p>12 Q. Is that referring to the EtherTIP</p> <p>13 software?</p> <p>14 A. No.</p> <p>15 Q. What is that referring to?</p> <p>16 A. That's referring to the Massbus-Ethernet</p> <p>17 Interface Subsystem.</p> <p>18 Q. And that's also reflected with the acronym</p> <p>19 MEIS, correct?</p> <p>20 A. Yes.</p> <p>21 Q. Did Cisco use any of the software for the</p> <p>22 MEIS?</p> <p>23 A. No.</p> <p>24 Q. Can you go to the page ending with Bates</p> <p>25 No. 888 in Exhibit 454.</p> <p style="text-align: right;">Page 225</p>
<p>1 MR. NEUKOM: Objection. Vague.</p> <p>2 THE WITNESS: Yes.</p> <p>3 BY MR. WONG:</p> <p>4 Q. Were you familiar with how the VAX</p> <p>5 command-line interface operated?</p> <p>6 A. VAX is the name of a piece of hardware</p> <p>7 that would run an operating system.</p> <p>8 Q. Thank you.</p> <p>9 What is the operating system that the VAX</p> <p>10 hardware ran?</p> <p>11 A. At Stanford there were two possibilities,</p> <p>12 something called VAX VMS, and there was also</p> <p>13 Berkeley UNIX.</p> <p>14 Q. Is Berkeley UNIX the same as BSD?</p> <p>15 A. Yes.</p> <p>16 Q. Were you familiar with the VAX VMS</p> <p>17 command-line interface?</p> <p>18 A. No.</p> <p>19 Q. Were you familiar with the Berkeley UNIX</p> <p>20 command-line interface?</p> <p>21 A. Yes.</p> <p>22 Q. The last bullet point on the page ending</p> <p>23 in 886 of Exhibit 454, do you see that? It starts</p> <p>24 with "Supervised a computer science department."</p> <p>25 A. Yes, I see that paragraph.</p> <p style="text-align: right;">Page 224</p>	<p>1 A. Uh-huh. Yes. I'm on that page.</p> <p>2 Q. The first bullet point, or I guess the</p> <p>3 only bullet point on this page starts with "Acted as</p> <p>4 Stanford contact."</p> <p>5 Do you see that?</p> <p>6 A. Yes, I see that paragraph.</p> <p>7 Q. Is it true that you acted as Stanford</p> <p>8 contact with DEC for field testing of two new</p> <p>9 releases of the DEC-20 operating system?</p> <p>10 A. Let me finish the paragraph so I can</p> <p>11 establish context.</p> <p>12 Q. Sure. Please take your time.</p> <p>13 A. Okay. I've read the paragraph. Your</p> <p>14 question is?</p> <p>15 Q. Is it true you that you acted as the</p> <p>16 Stanford contact with Digital Equipment Corporation</p> <p>17 for field testing two new releases of the DEC-20</p> <p>18 operating system?</p> <p>19 A. Yes.</p> <p>20 Q. Is the DEC 20 operating system the same</p> <p>21 thing as the TOPS-20 operating system?</p> <p>22 A. Yes.</p> <p>23 Q. Further down on this same page ending with</p> <p>24 control numbers 888 on Exhibit 454, there's a</p> <p>25 section called "Special Skills Knowledge or Training</p> <p style="text-align: right;">Page 226</p>

Response	Percentage
U.S. should take action to address climate change	95%
U.S. should not take action to address climate change	5%
U.S. should take action to address climate change (Men)	95%
U.S. should take action to address climate change (Women)	90%

Page 235

Page 239

Page 243

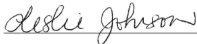
Page 259

Page 363

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<p>1 Mr. Lougheed. 2 Now, those two sentences that you read 3 from the Stanford Ethertip User Guide marked as 4 Exhibit 36 and the Cisco Systems ASM/AGS User Manual 5 marked as Exhibit 476 are exactly the same, correct? 6 A. Yes. I wrote both sentences. 7 Q. And so Cisco copied those two sentences 8 from the Stanford guide marked as Exhibit 36 and put 9 them into the Cisco guide marked as Exhibit 476, 10 correct? 11 MR. NEUKOM: Objection. Asked and 12 answered a couple times now. 13 MR. WONG: I'm asking about those two 14 particular sentences. 15 MR. NEUKOM: Yeah. And before you asked a 16 blanket question and you didn't like his answer, 17 which I thought was a pretty darn good one. So you 18 decided to just keep him in the room -- 19 MR. WONG: Counsel. 20 MR. NEUKOM: Look, you responded to my 21 objection. You wanted to engage me. So I'll 22 explain my objection. If you don't want me piping 23 up, that's fine. Just let me make objections for 24 the record. 25 Now you're asking him the exact same</p> <p style="text-align: right;">Page 395</p>	<p>1 MR. WONG: I think it's our understanding 2 that all witnesses can have 30 days or something. 3 MR. NEUKOM: By stipulation. 4 MR. WONG: Great. 5 THE VIDEOGRAPHER: This concludes today's 6 videotaped deposition of Mr. Kirk Lougheed. We're 7 off the record at 4:37 p.m. 8 (TIME NOTED: 4:37 P.M.) 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p> <p style="text-align: right;">Page 397</p>
<p>1 question after having had the fourth employee of 2 Cisco, Mr. Lougheed, who is now here at almost 5:00 3 reading aloud from documents. And you asked him the 4 same question again to see if you can get a 5 different answer. So go for it. This is starting 6 to feel increasingly not very respectful of this 7 witness's time. 8 BY MR. WONG: 9 Q. Do you want me to read the question again? 10 I'll read the question again. 11 A. That would be fine. 12 Q. Cisco copied those two sentences that you 13 just read aloud into the record for its user manual 14 marked as Exhibit 476 from the Stanford user manual 15 marked as Exhibit 36, correct? 16 A. I wrote both manuals. 17 MR. WONG: I have no further questions. 18 THE VIDEOGRAPHER: This concludes today's 19 videotaped deposition of Mr. Kirk -- 20 MR. NEUKOM: Oh, I'm sorry to interrupt. 21 On behalf of Mr. Lougheed, he reserves the 22 right to review an errata of the transcript. I 23 don't know, Ryan, if we've been doing this by 24 stipulation for all witnesses, even if it's not put 25 on the record.</p> <p style="text-align: right;">Page 396</p>	<p>1 DECLARATION UNDER PENALTY OF PERJURY 2 3 I, KIRK LOUGHEED, the witness herein, 4 declare under penalty of perjury that I have read the 5 foregoing in its entirety; and that the testimony 6 contained therein, as corrected by me, is a true and 7 accurate transcription of my testimony elicited at said 8 time and place. 9 10 Executed this ____ day of _____, 2016, at 11 _____. 12 (City) (State) 13 14 15 16 17 18 KIRK LOUGHEED 19 20 21 22 23 24 25</p> <p style="text-align: right;">Page 398</p>

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<p>1 REPORTER'S CERTIFICATION</p> <p>2 I, Leslie Johnson, a Certified Shorthand</p> <p>3 Reporter of the State of California, do hereby certify:</p> <p>4 That the foregoing proceedings were taken</p> <p>5 before me at the time and place herein set forth; that</p> <p>6 any witnesses in the foregoing proceedings, prior to</p> <p>7 testifying, were administered an oath; that a record of</p> <p>8 the proceedings was made by me using machine shorthand</p> <p>9 which was thereafter transcribed under my direction;</p> <p>10 that the foregoing transcript is a true record of the</p> <p>11 testimony given.</p> <p>12 Further, that if the foregoing pertains to</p> <p>13 the original transcript of a deposition in a Federal</p> <p>14 Case, before completion of the proceedings, review</p> <p>15 of the transcript [] was [] was not requested.</p> <p>16 I further certify I am neither financially interested in</p> <p>17 the action nor a relative or employee of any attorney or</p> <p>18 any party to this action.</p> <p>19 IN WITNESS WHEREOF, I have this date</p> <p>20 subscribed my name.</p> <p>21 Dated: April 19, 2016</p> <p>22</p> <p>23 </p> <p>24 LESLIE JOHNSON</p> <p>25 CSR No. 11451, RPR, CCRR</p> <p style="text-align: right;">Page 399</p>	

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

- - - - - x Case No.
: 5:14-cv-05344-BLF (PSG)
:
CISCO SYSTEMS, INC., :
:
Plaintiff, :
:
vs. :
:
ARISTA NETWORKS, INC., :
:
Defendant. :
:
- - - - - x

VIDEOTAPED DEPOSITION OF GREG SATZ
March 23, 2016
HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY
VOLUME 1

Reported by
Brooke R. Bohr
CSR No. 753
Job No 2272380
Pages 1 - 168

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<p>1 "Stanford Ethertip/Gateway User and Configuration 2 Guide." 3 A. Yeah. 4 Q. Had you ever seen this before? 5 A. I'm sure I have. I don't have a 6 recollection of it, and I don't remember this date 7 at all. This is a pretty late date. 8 Q. Do you know Glenn Truitt? 9 A. I do. 10 Q. What did he work on at Stanford? 11 A. I no longer remember. I do know that 12 he had his hands in this software, but a lot of 13 people did. Jeffrey Mobile, Benji Levy. This 14 was -- this code was a lot of research work. And 15 so if one of the graduate students felt there was 16 an application they wanted to experiment with, 17 this really was the beginning of what then became 18 the multi-protocol router and Cisco's router. 19 So -- oh, yeah, there's some really old -- really 20 old stuff here. 21 Q. Did you become familiar with some of 22 the commands from this device? 23 A. Yes. 24 Q. Yeah? How did you become familiar with 25 it?</p> <p style="text-align: right;">Page 26</p>	<p>1 Q. This was a -- begins a section called 2 "privileged commands." Do you see that? 3 A. Um-hum. I do. 4 Q. And were you aware of a privileged mode 5 in this -- in the TIP Gateway? 6 A. Sure. 7 Q. Explain what was the purpose of the 8 privilege mode there. 9 A. It mimicked the TOPS-20 style of 10 parsing, and it -- there were commands that people 11 would use to just have the device do what it does 12 day-to-day, and there were commands that 13 administrators or users who needed to maintain the 14 device in the network would use. And so privilege 15 commands were the latter set, and TOPS-20 had a 16 very similar model. 17 Q. And this document says in the -- I 18 guess in the second sentence, it's -- or I'll read 19 the first sentence also: There's a second set of 20 commands available to the Ethertip user. The two 21 command levels are disjoint. That is, the 22 privileged mode is not a superset of the normal 23 mode. 24 Do you see that? 25 A. Um-hum.</p> <p style="text-align: right;">Page 28</p>
<p>1 A. Well, we were users of these devices 2 when I -- the state of the art back then, before 3 there were all of these computers and laptops, is 4 you used a basic terminal with RS232 into some 5 device that converted the commands into network 6 protocols and used that across the network to talk 7 to mainframes. That was state of the art. 8 So on my desk at Stanford and at SRI 9 was these computers that were just terminals. 10 They -- all they did was take a capture of 11 keypress and generate a character. And that 12 character was shipped across the network 13 somewhere. And the computer would get that 14 character, do something with it, and ship you back 15 the output. 16 So that's what a TIP was, terminal 17 interface processor. It allowed you to take an 18 RS232 terminal and sit on the network without 19 talking to the computer directly. And I think 20 Kirk was responsible for gluing the TIP and the 21 Gateway software together, because they were two 22 different software bases. 23 Q. So if I could ask you to turn to Page 6 24 of that Exhibit 36. 25 A. Okay.</p> <p style="text-align: right;">Page 27</p>	<p>1 Q. So what did you understand to be the 2 purpose of the normal mode, then, as opposed to 3 the privileged mode? 4 A. Day-to-day users don't need privileged 5 mode. They go in, they make their connections, 6 they do what they do to get their work done, and 7 that's the extent of their relationship to the 8 software. 9 The people who administer the device 10 and who might need to add a new feature or upgrade 11 the software would have to use privileged mode. 12 And it is a complete separate set of functions. 13 And in particular for the programmers, 14 they -- you know, they made a mistake, and they've 15 got to go figure out why something is not working, 16 especially for research work. 17 Q. I want to ask about some of the 18 commands that follow here on Page 6. 19 "Access.lists," I see under 3.1. 20 A. Um-hum. 21 Q. Was that a command you were familiar 22 with? 23 A. That's a very common and important 24 command. 25 Q. What is an access.list command?</p> <p style="text-align: right;">Page 29</p>

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<p>1 A. It gave the device the ability to 2 decide what data flows it would allow through or 3 prevent, and/or connections that people could make 4 to the box. So if, for example, your department 5 wasn't allowed to use this particular box, we 6 could create an access.list so you couldn't use 7 it.</p> <p>8 Q. Was -- to your knowledge, was 9 access.list used in any other operating systems or 10 softwares, software?</p> <p>11 MR. NEUKOM: Objection; foundation.</p> <p>12 THE WITNESS: I can't say I've ever seen 13 access.list before this application.</p> <p>14 Q. BY MR. FERRALL: The next command here 15 is -- it says "arp.table." What is that, do you 16 know?</p> <p>17 A. Yes, address resolution protocol. So 18 that was the mechanism that computers used to 19 discover each other's -- I'm going to get really 20 boring here -- 48-bit ethernet address and match 21 it to their 32-bit IP address.</p> <p>22 Q. And was the address resolution protocol 23 something that was known outside of the Stanford 24 network context?</p> <p>25 A. Oh, yes, it was a standard.</p> <p style="text-align: right;">Page 30</p>	<p>1 just some here I don't -- I have no recollection 2 of.</p> <p>3 Q. Had you ever heard of or used show 4 commands in any context before you went to Cisco?</p> <p>5 A. Every computer has show commands. I 6 mean every operating system had used the word 7 "show" as a way to convey internal information 8 outward.</p> <p>9 Q. What about banner, which, by the way, 10 I see at the bottom of Page 8 of Exhibit 36. But 11 my question is more general, which is were you 12 aware of a banner command before you went to 13 Cisco?</p> <p>14 A. I don't remember. I had used, by then, 15 anywhere from 15 to 20 different operating 16 systems. And so I -- banner doesn't stand out as 17 anything.</p> <p>18 Q. If I could ask you to look at Page 13 19 of this exhibit, Exhibit 36. Do you see on that 20 page there are a number of commands that have in 21 brackets the word "no" before the command?</p> <p>22 A. Um-hum. I do.</p> <p>23 Q. Do you know what that means?</p> <p>24 A. It is an optional keyword.</p> <p>25 Q. And what does it do? What function</p> <p style="text-align: right;">Page 32</p>
<p>1 MR. NEUKOM: Objection; lack of foundation, 2 calls for speculation.</p> <p>3 Q. BY MR. FERRALL: Now, don't worry, I'm 4 not going to go through every command in here.</p> <p>5 A. You'll need coffee.</p> <p>6 MR. NEUKOM: And I think, actually, Brian, I 7 didn't -- you said a little while back that the 8 next -- just to make sure the transcript is clean, 9 after discussing access.list, you said the next 10 one listed is arp.table.</p> <p>11 MR. FERRALL: That's -- you're right. 12 That's not correct. That was -- I skipped one.</p> <p>13 MR. NEUKOM: Okay.</p> <p>14 MR. FERRALL: Thank you.</p> <p>15 Q. BY MR. FERRALL: Were you familiar with 16 show commands used in the Stanford TIP?</p> <p>17 A. Yeah. I didn't do a lot of work with 18 the TIP, so I can't say I have a great familiarity 19 with this version of the software.</p> <p>20 Q. Okay.</p> <p>21 A. By the time I spent time with the 22 software, it had been rewritten and the parser, 23 which is the interesting part for this discussion, 24 had been changed. So a lot of these commands are 25 almost like looking at them new again. There's</p> <p style="text-align: right;">Page 31</p>	<p>1 does it serve?</p> <p>2 A. Excuse me. Optional keywords just 3 allow you to include them or not include them. So 4 you -- I don't know if you're asking me what it 5 means in relationship to each command or the 6 generic optional keyword.</p> <p>7 Q. Well --</p> <p>8 A. There's layers.</p> <p>9 Q. Okay. Fair enough.</p> <p>10 Is there an overall purpose of -- if 11 you wanted -- if you decided to include "no" as 12 an option before these commands, is there a 13 generic -- general way of describing what that 14 would do?</p> <p>15 MR. NEUKOM: Objection; vague and compound.</p> <p>16 THE WITNESS: It is a negation in this 17 particular usage. This, again, gets back to the 18 mechanics or the API versus the content. So the 19 confusion is I'm going to -- as a somewhat of a 20 programmer or someone who has worked at the 21 building of this, I'm more coming from a here is 22 the mechanical word. An optional keyword is an 23 optional keyword. What it actually means is going 24 to be interpreted by the code that is written. So 25 in this particular case, the "no" in front would</p> <p style="text-align: right;">Page 33</p>

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<p>1 MR. NEUKOM: Objection; vague and compound.</p> <p>2 THE WITNESS: They would augment the command</p> <p>3 set, the features, and there was, typically, a</p> <p>4 user interface component to it, like modifying the</p> <p>5 menu commands on your laptops today.</p> <p>6 Q. BY MR. FERRALL: And was there -- would</p> <p>7 they, typically, build upon existing keywords?</p> <p>8 MR. NEUKOM: Same objections, and calls for</p> <p>9 speculation.</p> <p>10 THE WITNESS: Depending on the feature set.</p> <p>11 If it was an extension of an existing feature set</p> <p>12 or if it was brand new. I mean, as you described</p> <p>13 a tree, those trees can be rearranged and</p> <p>14 augmented or removed.</p> <p>15 MR. FERRALL: Okay. Why don't we take our</p> <p>16 first break. We've been going for about an hour.</p> <p>17 THE WITNESS: Okay.</p> <p>18 THE VIDEOGRAPHER: The time is 11:12 a.m.</p> <p>19 Off the record.</p> <p>20 (Recess taken.)</p> <p>21 THE VIDEOGRAPHER: The time is 11:23 a.m.</p> <p>22 On the record.</p> <p>23 Q. BY MR. FERRALL: Mr. Satz, are you</p> <p>24 familiar with any use of a "clear" command from</p> <p>25 either TOPS-20 or early operating systems?</p> <p style="text-align: right;">Page 46</p>	<p>1 A. Um-hum.</p> <p>2 Q. And a normal mode, I think. What were</p> <p>3 the other modes of TOPS-20 that you could recall?</p> <p>4 A. They weren't necessarily modes, as --</p> <p>5 you might think of them as different parse trees,</p> <p>6 to use your tree analogy. They were command sets</p> <p>7 that would be made available or not available</p> <p>8 depending on, in the case of privilege mode,</p> <p>9 having a password. So you had to know the secret</p> <p>10 code to then enable the parse tree that was called</p> <p>11 privilege mode.</p> <p>12 Q. Was there a different prompt</p> <p>13 indicator --</p> <p>14 A. There is.</p> <p>15 Q. -- for the different command sets that</p> <p>16 were available, if you will?</p> <p>17 A. Yes. And TOPS-20 -- and I think VMS</p> <p>18 used the same mode -- had a subcommand mode. So</p> <p>19 you could -- I don't know if you would put a comma</p> <p>20 at the end of the line or if it was just a -- it</p> <p>21 knew you were going into the mode. I can't -- I</p> <p>22 don't remember anymore. But it would then</p> <p>23 double-prompt you. So if your prompt was, like, a</p> <p>24 dollar sign, it would give you two dollar signs to</p> <p>25 know you were in the subcommand mode. Or in the</p> <p style="text-align: right;">Page 48</p>
<p>1 A. I can't say I recall that.</p> <p>2 Q. Okay.</p> <p>3 A. There could have been, but there's a</p> <p>4 check through the documentation better than my</p> <p>5 memory.</p> <p>6 Q. Okay. How about a "set" command?</p> <p>7 A. I'm pretty sure VMS had set, as well as</p> <p>8 TOPS-20.</p> <p>9 Q. Now, you're aware that Cisco later used</p> <p>10 show commands, right?</p> <p>11 A. (Witness nods head.)</p> <p>12 Q. What was the purpose of the Cisco show</p> <p>13 commands, in general? I know there were many.</p> <p>14 MR. NEUKOM: Objection; vague and compound.</p> <p>15 THE WITNESS: To take data from inside the</p> <p>16 software and present it to a user.</p> <p>17 Q. BY MR. FERRALL: Were you aware of a</p> <p>18 feature of TOPS-20 called "exec," E-X-E-C?</p> <p>19 A. Um-hum. Yes.</p> <p>20 Q. What was that?</p> <p>21 A. The exec was the piece of software in</p> <p>22 the operating system who interacted with the user</p> <p>23 and contained the parser.</p> <p>24 Q. We talked earlier about a privilege</p> <p>25 mode in TOPS-20.</p> <p style="text-align: right;">Page 47</p>	<p>1 privilege mode it would change the prompt from a</p> <p>2 single dollar sign to, like, an "at" sign or a</p> <p>3 "pound" sign. It would give you indication. And</p> <p>4 usually there were ways to configure that so you</p> <p>5 could tell it what you wanted it to do.</p> <p>6 Q. And I think you said that you would</p> <p>7 need a password, for example, to enter the</p> <p>8 privilege mode?</p> <p>9 A. In the ether TIP or the router software</p> <p>10 that Cisco used. In TOPS-20 it was whether you</p> <p>11 had a capability, you had an account that was</p> <p>12 privileged.</p> <p>13 Q. Was there a command or a -- something</p> <p>14 you would enter in order to switch modes in</p> <p>15 TOPS-20?</p> <p>16 A. That was "enable."</p> <p>17 Q. "Enable" was the command?</p> <p>18 A. (Witness nods head.)</p> <p>19 Q. Okay.</p> <p>20 A. The magic word. All these commands are</p> <p>21 are just a magic word that you agree will do a</p> <p>22 function.</p> <p>23 Q. Do you know, was there a configuration</p> <p>24 mode in TOPS-20 to your knowledge?</p> <p>25 A. TOPS-20 had the benefit of files. So,</p> <p style="text-align: right;">Page 49</p>

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<p>1 Exhibit 405 is a one-page document</p> <p>2 marked CSI-CLI-00746924.</p> <p>3 Exhibit 406 begins CSI-CLI-01828732,</p> <p>4 and for this document I'll read the last number</p> <p>5 because I think we're all unclear whether it is</p> <p>6 one versus multiple documents. This ends with</p> <p>7 Bates stamp CSI-CLI-01828783.</p> <p>8 Exhibit 407 begins Bates stamp</p> <p>9 CSI-CLI-01295215.</p> <p>10 And Exhibit 408 begins</p> <p>11 CSI-CLI-01295181.</p> <p>12 MR. NEUKOM: Thanks all.</p> <p>13 MR. FERRALL: Agreed. Thank you.</p> <p>14 (The deposition concluded at 3:31 p.m.)</p> <p>15 -oo0oo-</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p style="text-align: right;">Page 166</p>	<p>1 REPORTER'S CERTIFICATE</p> <p>2</p> <p>3</p> <p>4 I, BROOKE R. BOHR, a Notary Public in</p> <p>5 and for the State of Idaho, do hereby certify:</p> <p>6 That prior to being examined, the</p> <p>7 witness named in the foregoing deposition was by</p> <p>8 me duly sworn to testify the truth, the whole</p> <p>9 truth, and nothing but the truth;</p> <p>10 That said deposition was taken down by</p> <p>11 me in shorthand at the time and place therein</p> <p>12 named and thereafter reduced into typewriting</p> <p>13 under my direction, and that the foregoing</p> <p>14 transcript contains a full, true, and verbatim</p> <p>15 record of the said deposition.</p> <p>16 I further certify that I have no</p> <p>17 interest in the event of the action.</p> <p>18 WITNESS my hand and seal March 30, 2016.</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23 <%signature%></p> <p>24 Brooke R. Bohr</p> <p>25 CSR No. 753</p> <p style="text-align: right;">Page 168</p>
<p>1 VERIFICATION</p> <p>2 I declare under penalty of perjury</p> <p>3 under the laws that the foregoing is</p> <p>4 true and correct.</p> <p>5</p> <p>6 Executed on _____, 20____,</p> <p>7 at _____.</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12 _____</p> <p>13 WITNESS SIGNATURE</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p style="text-align: right;">Page 167</p>	